

What is claimed is:

1. A fracture fixation pin, comprising:

a) a first portion having a first diameter and first threads of a first thread diameter, said first portion having a tip at one end and a second end;

b) a second portion coupled to said second end of said first portion, said second portion having a second diameter larger than said first diameter, and second threads of a second thread diameter larger than said first thread diameter, said second threads extending in a same direction as said first threads; and

c) a non-threaded shaft portion coupled to said second portion, said shaft portion having a cross-sectional dimension which does not exceed a dimension of said second diameter.

2. A fracture fixation pin according to claim 1, wherein:

said first and second threads are continuous.

3. A fracture fixation pin according to claim 1, wherein:

said tip includes a plurality of cutting flutes.

4. A fracture fixation pin according to claim 1, wherein:
said tip is substantially conical and includes a surface angled at 30° relative to a longitudinal axis.
5. a fracture fixation pin according to claim 1, wherein:
said first portion has a first length of approximately 2.55 inches and a first diameter of approximately 0.125 inch, and said second portion has a second length of approximately 0.6 inch and a second diameter of approximately 0.015 inch.
6. A fracture fixation pin according to claim 1, wherein:
said shaft portion is substantially cylindrical.
7. A fracture fixation pin according to claim 1, wherein:
said shaft is frangibly coupled to second portion.
8. A fracture fixation pin according to claim 1, wherein:
a channel is provided about said pin between said second portion and said shaft portion.
9. A fracture fixation pin according to claim 1, wherein:
said shaft has cross-sectional dimension smaller than said second diameter of said second portion.

10. A fracture fixation pin according to claim 1, wherein:
said pin is not provided with a head portion.
11. A fracture fixation pin according to claim 1, wherein:
all threads on said first portion have said first thread diameter.
12. A fracture fixation pin according to claim 1, wherein:
said pin is made of metal.
13. A fracture fixation pin according to claim 1, wherein:
said second portion is provided with a plurality of longitudinal grooves adjacent said shaft portion and spaced-apart about a circumference of said second portion.
14. A fracture fixation pin according to claim 13, wherein:
said plurality of grooves includes exactly three grooves spaced apart 120° about said circumference of said second portion.
15. A fracture fixation pin according to claim 13, wherein:
each of said grooves has a depth which extends below said second threads.

16. A fracture fixation pin system, comprising:

a) a pin including

i) a first portion having a first diameter and first threads of a first thread diameter, said first portion having a tip at one end and a second end,

ii) a second portion coupled to said second end of said first portion, said second portion having a second diameter larger than said first diameter, and second threads of a second thread diameter larger than said first thread diameter, said first and second threads being continuous with each other and having a common pitch and thread depth, and

iii) a non-threaded shaft portion coupled to said second portion, said shaft portion having a cross-sectional dimension which does not exceed a dimension of said second diameter,

said second portion adjacent said shaft portion defining a plurality of longitudinal spaced apart negative spaces; and

b) a driver member including a socket having structure adapted to interfere with said negative spaces.

17. A fracture fixation pin system according to claim 16, further comprising:

c) a mill tool having structure adapted to remove bone and define an opening in the bone into which said socket of said driver member can be inserted.

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18. A fracture fixation pin, comprising:

a) a first portion having a first diameter and first threads of a first thread diameter, said first portion having a tip at one end and a second end; and

b) a second portion having a first end coupled to said second end of said first portion and a second free end, said second portion having a second diameter larger than said first diameter, and second threads of a second thread diameter larger than said first thread diameter, said first and second threads being continuous with each other and having a common pitch and thread depth, wherein said second free end is provided with a plurality longitudinal grooves spaced-apart about a circumference of said second portion.

19. A fracture fixation pin according to claim 18, wherein:

said plurality of grooves includes three grooves spaced apart 120° about said circumference of the second portion.

20. A fracture fixation pin according to claim 18, wherein:

each of said grooves has a depth which extends below said second threads.

21. A fracture fixation pin system, comprising:

a) a pin including

i) a first portion having a first diameter and first threads of a first thread diameter, said first portion having a tip at one end and a second end, and

ii) a second portion having a first end coupled to said second end of said first portion and a second free end, said second portion having a second diameter larger than said first diameter, and second threads of a second thread diameter larger than said first thread diameter, said first and second threads being continuous with each other and having a common pitch and thread depth, wherein said second free end is provided with a plurality longitudinal grooves spaced-apart about a circumference of said second portion; and

b) a driver member including a socket having structure adapted to interfere with said grooves on said second portion of said pin.

22. A fracture fixation pin system according to claim 21, further comprising:

c) a mill tool having structure adapted to remove bone and define an opening in the bone into which said socket of said driver member can be inserted.

23. A fracture fixation pin, comprising:

a pin having a threaded portion provided with threads and a shaft portion, said threaded portion including a tip end and an opposite end, said opposite end including a plurality of longitudinal grooves adjacent said shaft portion and spaced-apart about a circumference of said threaded portion.

24. A fracture fixation pin according to claim 22, wherein:

said grooves interrupt said threads.

25. A fracture fixation pin according to claim 22, wherein:

said plurality of grooves comprise exactly three grooves spaced apart 120° about the circumference of the threaded portion.

26. A fracture fixation pin according to claim 22, wherein:

each of said grooves has a depth which extends below said threads at a location of said grooves.

27. A fracture fixation pin according to claim 22, wherein:

said threaded portion includes a first portion having a first diameter and first threads of a first thread diameter, and a second portion having a second diameter larger than said first diameter and second threads of a second thread diameter larger than said first thread diameter.

28. A fracture fixation pin according to claim 27, wherein:
said first and second threads are continuous with each other.

29. A fracture fixation pin according to claim 27, wherein:
said first and second threads have a common pitch.

30. A fracture fixation pin according to claim 27, wherein:
said first and second threads have a common thread depth.

31. A fracture fixation pin system, comprising:

a) a pin having a first portion provided with threads and a shaft portion, said first portion including a tip end and an opposite end, said opposite end including a plurality of longitudinal grooves adjacent said shaft portion and spaced-apart about a circumference of said first portion; and

b) a driver member including a socket having structure adapted to interfere with said grooves on said first portion of said pin.

32. A fracture fixation pin system according to claim 31, further comprising:

c) a mill tool having structure adapted to remove bone and define an opening in the bone into which said socket of said driver member can be inserted.